### CONTRACT CHANGE ORDER

Change Requested by:

Engineer

		- UITDEIT	Onlinge requested by. Ling	Onlinge requested by. Engineer		
CCO: 46	Suppl. No. 0	Contract No. 04 - 0120F4	Road SF-80-13.2/13.9	FED. AID LOC.:		
You are direc				ellowing described work not included in the plans a	and	
Description	of work to be done	e, estimate of quantities and pri-	ces to be paid. (Segregate bet	veen additional work at contract price, agreed pric	e and	

force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

## **Extra Work at Force Account:**

Provide additional materials, equipment, labor and services for Item 36, High Strength Prestressing Rod (75MM), which are not otherwise provided for in the plans and Special Provisions, as directed by the Engineer. Additional materials, equipment, labor, and services will include, but will not be limited to:

- 1. An additional 26-each High Strength Prestressing Rod assemblies, including Denso tape coating and transportation to the job site.
- 2. 304-each Aluminum Anchor Caps.
- 3. Support labor and equipment, not otherwise provided by the manufacturer, required to complete the work of stressing High Strength Prestressing Rods. Support labor and equipment shall be agreed upon by the Engineer in advance of stressing operations.
- 4. Required insurance policies, such as California Workmen's Compensation Insurance, not otherwise provided by the High Strength Prestressing Rod vendor.
- 5. Securing the availability of stressing jack(s) in advance of field operations as directed by the Engineer.

Additional materials, equipment, labor, and services to be paid through CCO 46 will not include:

- 1. Manufacturer's technical representative or stressing services requested by the Contractor.
- Transportation and accommodations for Manufacturer's representatives.
- 3. Jacks and support equipment provided by the manufacturer.
- 4. Shipping for jacks and support equipment provided by the manufacturer.
- 5. Variances in the GBP/USD exchange rate, except the actual exchange rate will be applied to payments made for additional materials, equipment, labor, and services ordered pursuant to CCO 46.

Payments authorized by the Engineer, as necessary, will be paid in accordance with the provisions of Section 4-1.03D, "Extra Work" of the Standard Specifications and Section 5-1.24, "Force Account Payment" of the Special Provisions.

Estimated cost of Extra Work at Force Account	\$150,000.00						
	Estimated Cost: Increase 🗸 Decrease 🗌	\$150,000.00					
By reason of this order the time of completion will be adjusted as	follows: 0 days						
Submitted by )		www.company.com					
Signature Sour Jusell	Resident Engineer  Gary Pursell, P.E., Sup.T.E.	Date 11/5/07					
Approval Recommended by							
Signature Book For RT Morrow	Supervising Bridge Engineer Richard Morrow, P.E., Sup. BE	Date /5/57					
Engineer Approval by							
Signature Hours Jusell	Supervising Transportation Engineer Gary Pursell, P.E., Sup. TE	Date 1/7/07					
We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.							
NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.							
Contractor Acceptance by							
Signature August	(Print name and title) Nichael D. Flowers	Date //. 5.07					
,	Project D. Vector.						

# **CONTRACT CHANGE ORDER MEMORANDUM**

TO: Pete Siegenthaler, Prin. TE / Gary Pursell, P.E., Sup T.E. FROM: Gary Pursell, P.E., Sup.T.E.				FILE	E.A.	04 - 0120F4	· ·	
				C	CO-RTE-PM SF-80-13.2/13.9  FED. NO.			
CCO#:	<b>46</b> SUPF	PLEMENT#: 0	Category Code: CHS	A CON	TINGENCY	BALANCE (incl. this chan	ge) \$140,534,525.58	
COST: \$150,000.00 INCREASE 🗹 DECREASE 🗌			E 🗌 HEAI	HEADQUARTERS APPROVAL REQUIRED? ✓ YES ☐ NO				
SUPPLEMENTAL FUNDS PROVIDED: \$0.00					IS THIS REQUEST IN ACCORDANCE WITH ✓ YES ☐ NO ENVIRONMENTAL DOCUMENTS?			
	CRIPTION: Macalloy Bars				JECT DESC STRUCT SI	CRIPTION: ELF-ANCHORED SUSPEN	ISION BRIDGE	
Original Contract Time: Time Adj. This Change: Previously Approved Time Adjustments:				ntage Time Adjusted: ing this change)	Total # of Unreconciled Deferred Time CCO(s): (including this change)			
•	Ann Day(s)		Day(e)	an Day(e)	1	at 0/	_	

DATE: 11/7/2007

Page 1 of 2

### THIS CHANGE ORDER PROVIDES FOR:

New and unforeseen materials, equipment, labor and services related to Contract Item 36, High Strength Prestressing Rod (75MM), which were not otherwise provided for in the contract Special Provisions. The plans and specifications required the installation of 304-each high strength prestressing rods, which were to be manufactured and supplied by Macalloy Limited, of the UK, the only known source that could meet the requirements for the contract. The Department entered into a sole source agreement with Macalloy prior to bid opening. This CCO provides for rectifying several inconsistencies between the sole source agreement and the contract special provisions, and provides for payment for extra high strength bars ordered by the Engineer. Specific changes include the following:

1) The contractor was directed by the Engineer, to provide an additional 28-each High Strength Prestressing Rod assemblies, including Denso tape coating and transportation to the job site. These rods were ordered to reduce the risk of project schedule delays.

During initial tensile testing of the planned rods, one lot of rods failed the required minimum test criteria resulting in 54-each rod assemblies being rejected. The supplier then proceeded with re-fabrication of additional lots of bars to replace the 54 rejected bars. Failure of any of the replacement lots would have resulted in a delay of several months to the schedule since the testing facility, an educational institution in Germany, was scheduled to be shut down for the summer.

The Resident Engineer ordered the additional bars as extra for backup to avoid schedule delays in the event of further failures, or if the planned bars become lost or damaged prior to installation for any reason whatsoever. Toll Bridge Program management has advocated such schedule risk reduction measures.

Two of the 28 additional bars ordered were utilized for destructive tensile testing. The two destroyed bars are considered included in the price of the remaining 26 bars to be purchased and shipped.

- 2) A total of 304 anchor caps are required to protect the stressing nuts and ends of the High Strength Prestressing Rods. However, the contract Special Provisions did not indicate the caps were required, and the caps were not included in the price quoted from Macalloy to Caltrans for rod assemblies. Since the specifications did not include any material properties for the caps nor reference the caps, the Contractor is entitled for payment of these caps and will be compensated as extra work at force account.
- 3) The Special Provisions indicate a price of \$700/day as the manufacturer's charge for stressing the prestressing rods, including all necessary labor and equipment. However, in the agreement between Caltrans and Macalloy, the \$700/day only included the technician and the jack, and not necessary support equipment such as furnishing compressed air, lifting equipment, and support labor. Therefore, the Contractor is entitled for payment of the additional support equipment and labor, as agreed upon by the Engineer, and will be paid as extra work at force account.

EA: 0120F4 CCO: 46 - 0

DATE: 11/7/2007

Page 2 of 2

- 4) The sole source agreement between Macalloy and Caltrans specifically excluded required local insurance policies, such as California Workmen's Compensation Insurance. However, the Special Provisions did not indicate such insurance for manufacturer's representative was excluded from the prices quoted by Macalloy. Therefore, the Contractor is entitled for reimbursement of such insurance and will be paid for as extra work at force account.
- 5) As part of the agreement with Macalloy, jacks are to be provided to tension the high strength prestressing rods. Because the jacks are designed to fit the unique threads of the Macalloy rods and fit into the confined space, jacks are not readily available from any other suppliers. The rods are scheduled to be installed late in 2007; however, the rods are not scheduled to be stressed with the jacks until 2010, during installation of the Hinge K pipe beam. To assure the availability of jacks when needed in 2010, and avoid potential project schedule delays, the Engineer may order the delivering of the jacks sometime in advance of the need in 2010. If ordered to do so, the Contractor is entitled for reimbursement of the jacks that are to be rented, leased, or purchased with a buyback provisions as agreed upon with Macalloy, and the cost of securing the jacks early will be paid for at force account.

Payment for this work will be at Extra Work at Force Account for an estimated cost of \$150,000.00, which can be financed from the contingency fund. A detail of the costs will be placed in the project files.

No adjustment of contract time is warranted, as this change does not affect the controlling operation.

Maintenance concurrence is not required for this change order.

This change order received an Issue and Approve from Division of Construction on Oct. 26, 2007.

CONCURRED BY:					ESTIMATE OF	COST	
Construction Engineer: Res. Eng., Gary Pursell, Sup. TE		Date	10/1/07	THIS REQUEST			TOTAL TO DATE
Bridge Engineer:	Struct Rep, Rick Morrow, Sup TE	Date	10/1/07	ITEMS FORCE ACCOUNT	, -	.00	\$0.00
Project Engineer:	CT Oversight, Wenyl Long, P.E.	Date	10/30/07	AGREED PRICE	\$150,000 \$0	.00	\$150,000.00 \$0.00
Project Manager:	Proj Manager, Ken Terpstra	Date	10/5/07	ADJUSTMENT	\$0	.00	\$0.00
FHWA Rep.:		Date		TOTAL	\$150,000	.00	\$150,000.00
Environmental:		Date			FEDERAL PARTICI	PATION	
Other (specify):	PCE, Mike Forner, Prin TE	Date	10/2/07	PARTICIPATING NON-PARTICIPATING	PARTICIPAT (MAINTENANCE)		✓ NONE PARTICIPATING
Other (specify):	HQ, Patrick Treacy	Date	10/2/07	FEDERAL SEGREGATION	· i	ne Funding Source	
District Prior Approval By:				CCO FUNDED PER CO			D AS FOLLOWS
HQ (Issue Approve) By: HQ, Ken Darby		Date 10/26/07		FEDERAL FUNDING S	ENT		
Resident Engineer's Signature:		Date	107			- ENOL	



California Department of Transportation

#### CONSTRUCTION DIVISION

# District 4 CCO Desk

Date: 10/26/2007

Contract No.:

4 - 0120F4

Road: SF-80-13.2/13.9

FED. No.: NONE

SARTIPI - 04

Attention: 04 - SARWARY

**HQ Direction:** 

TO ISSUE AND APPROVE

**CCO No. 046** 

Sup. No. 0

Rev. No. 0

Per Your Submittal Dated: 10/26/2007

CCO Category Code: C - H - S - A

PROVIDES FOR RESOLVING DIFFERENCES BETWEEN THE CONTRACT SPECIAL PROVISION REQUIREMENTS AND THE SOLE SOURCE AGREEMENT CONCERNING THE HIGH STRENGTH PRESTRESSING RODS (75 MM) SUPPLIED BY MACALLOY LIMITED. ALSO PROVIDES FOR RISK MITIGATION IN THE FORM OF SUPPLY OF 28 ADDITIONAL ASSEMBLIES TO MINIMIZE POTENTIAL PROJECT SCHEDULE DELAYS. IN ADDITION, REQUIRES ANCHOR CAPS TO PROTECT THE RODS AND PROVIDES FOR ADDITIONAL JACKING COSTS.

ISSUE AND APPROVE IS CONDITIONAL ON THE FOLLOWING:

- 1. OBTAINING THE PROJECT ENGINEER'S SIGNATURE ON THE SPECIFICATION CHANGE AND SO NOTING ON THE CCO MEMO.
- 2. RESOLVING THE DIFFERENCE BETWEEN THE NUMBER OF ADDITIONAL RODS LISTED IN THE CCO (26) AND MEMO (28).

THE TOTAL COST FOR THIS CHANGE IS SHOWN AS \$150,000.00 WITH NO TIME ADJUSTMENT.

Items:

\$0.00

Force Account:

\$150,000.00

Agreed Price:

\$0.00

Adj. of Comp.

\$0.00

Total:

\$150,000.00

Time:

(NONE)

ELIZABETH DOOHER. **Acting Assistant Division** 

Chief, by:

Ken Darby

**Division of Construction** 

1120 "N" Street, MS-44, Sacramento, CA 95814

Fax Number: (916) 654-5735

To Confirm Transmission, Call (916) 654-5259